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WPI Acc No: 1984-071698/198412

XRAM Acc No: C84-030789

Fluidity improver which disperses wax and is used in fuel oil compsn. - comprises terpolymer of polyethylene, ethylenically unsatd. polyester and amine adduct of unsatd. glycidyl polyether or polyester

Patent Assignee: TOHO CHEM IND CO LTD (TOHR)

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP59025888	A	19840209	82JP-0135659	A	19820805	198412 B
JP90040110	B	19900910	82JP-0135659	A	19820805	199040

Priority Applications (No Type Date): 82JP-0135659 A 19820805

Patent Details:

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JP59025888 A 4

Abstract (Basic): JP 59025888 A

Fluidity improver is a ternary copolymer consisting of (a) ethylene or a mixt. contg. ethylene and 3-18C alpha-olefin (1-50wt.%), (b) ethylenically unsatd. ester of formula (I) (where R1 is H or methyl; R2 is -OOCR4 or -COOR4 (where R4 is H or 1-16C aliphatic hydrocarbon gp., etc.); R2 is H or -COOR4), and (c) ammine adduct of ethylenically unsatd. glycidyl ether or ester of formula (II) (where X is -COO-, -CH2O-, or -O-; R1 is H or CH3; R2 and R3 are H or 1-18C aliphatic hydrocarbon gp.).

Wt. ratio of a:b:c= (40-80):(10-40):(1-30) and the number average mol. wt. of the copolymer is 1000-10,000. Also claimed is a fuel oil compsn. having a dispersing effect for wax consisting of at least 95wt.% intermediate fraction of petroleum fuel oil, and 10-10,000 ppm ternary copolymer described above.

The fluidity improver keeps wax crystals dispersed for a long time. Troubles frequently encountered in cold districts in the use of intermediate fraction of petroleum fuel oil, such as diesel oil are therefore prevented.

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Title Terms: FLUID; IMPROVE; DISPERSE; WAX; FUEL; OIL; COMPOSITION; COMPRISE; TERPOLYMER; POLYETHYLENE; ETHYLENIC; UNSATURATED; POLYESTER; AMINE; ADDUCT; UNSATURATED; GLYCIDYL; POLYETHER; POLYESTER

Derwent Class: A95; H06

International Patent Class (Additional): C10L-001/22

File Segment: CPI

Manual Codes (CPI/A-N): A04-D09; A04-F01; A04-G08; A12-T03B; H06-B04; H06-B05

Plasdoc Codes (KS): 0037 0231 0242 0251 0258 0265 0272 0279 0293 0412 0419
0496 3007 3021 3035 3049 0503 3014 3028 3042 3056 0531 0538 0545 0552
0559 0566 0573 0580 0594 3063 0608 0790 0797 0811 0881 1034 1041 1055
1282 1384 1418 1425 1432 1619 1633 2000 2585 2704

Polymer Fragment Codes (PF):

001 014 034 04- 041 046 047 050 051 052 053 054 066 067 068 070 074 075
076 077 081 082 083 084 085 091 092 093 098 104 105 107 109 111 116
145 155 157 226 231 24& 240 28& 33- 336 37- 52& 575 583 589 661 69-
698 720 726 729

Derwent Registry Numbers: 0326-S; 0642-S; 0835-S; 0936-S; 0964-S

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